

Wintertime Air Pollution Response Plan

November 9, 2004



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This is a working document that will be updated regularly. Please visit the Department of Environmental Quality website at http://www.deq.state.id.us/air/dailyreports/pollution_response_plan_winter.pdf for the most up-to-date version of the Plan.

Wintertime Air Pollution Response Plan

From November 1 through March 31, when the air quality is forecasted to be poor, the Department of Environmental Quality (DEQ) will issue an air quality alert between 2 and 4p.m. each day to notify the Treasure Valley community of the following day's air quality condition forecasted for the Treasure Valley. If conditions are expected to be either **YELLOW** or **RED** for the weekend, alerts will continue to be issued at the regular time on Saturday and Sunday. These alerts will be reported to local media outlets and to others through an email notification list. The *Wintertime Air Pollution Response Plan* (Plan) urges citizens, businesses, and local governments to do their part to reduce winter air pollution everyday and especially during episodes of high pollution. The Plan will be updated as pollution sources in the Valley change and we develop a more precise scientific understanding of the air pollution problems we face.

DEQ has been monitoring the quality of the Treasure Valley's air since the 1970s. Since that time, previously high levels of carbon monoxide (CO) and particulate matter (PM₁₀) were reduced through a series of local and federal actions. Although those two pollutants have been successfully minimized, the area still has air quality issues with other pollutants.

DEQ began monitoring levels of fine particulate matter (PM_{2.5}) in the late 1990s. Since that time there have been exceedances of the federal health-based standards at monitors located in both Ada and Canyon Counties. Unlike coarse particulate and carbon monoxide, which could be effectively controlled by relatively simple measures, PM_{2.5} is much more complex in its formation and in the measures that are required to control it.

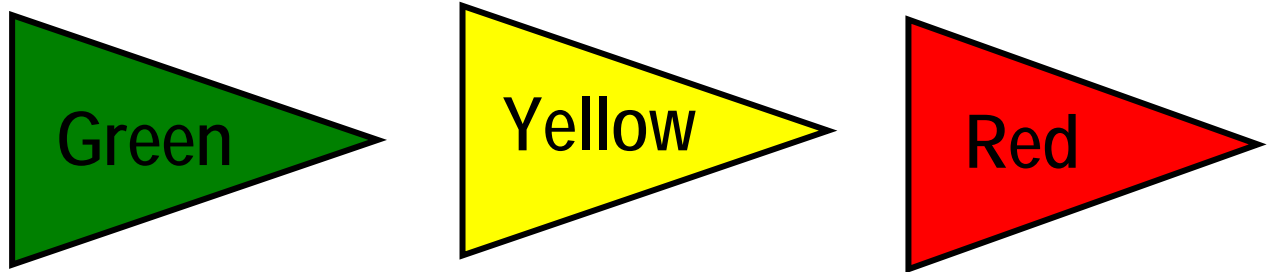
PM_{2.5} is made up of very small particles that can lodge very deep in the lungs of exposed individuals. It can be emitted directly from a source, like a vehicle tailpipe or chimney flue, but it is also formed by reactions between chemicals when the pollution is suspended in cold, stagnant air. The sources of the chemicals that create PM_{2.5} include: smoke from any kind of burning, industrial operations, agricultural operations, industrial and residential cleaning fluids, fuels, and exhaust from gasoline and diesel engines.

Recently, DEQ has begun forecasting pollution conditions for PM_{2.5} in the Treasure Valley. Those forecasts are made Monday through Friday, using pollutant monitoring data and current meteorological information. PM_{2.5} is primarily a wintertime problem in the Valley, although it is monitored continuously throughout the year. The season of major concern is from November 1 through March 31. PM_{2.5} pollution levels rise to dangerous levels when the Valley experiences strong temperature inversions, which trap the air in the airshed allowing the pollution levels to build. The Treasure Valley is a prime candidate for strong, long lived wintertime inversions because of the shape of the Valley and the prevailing weather patterns. We have no control over the land and weather characteristics, but we can control what we put into our air.

DEQ is mandated to protect public health and the environment. Under that mandate, in situations where high levels of air pollution are anticipated or present, DEQ coordinates efforts to ensure that the public is informed of the associated health risks. Simultaneously, to minimize health impacts DEQ coordinates efforts to bring pollutant levels down. To ensure that these efforts are effectively undertaken, DEQ has developed the *Wintertime Air Pollution Response Plan*. The

goal of the *Plan* is to create an opportunity for the public, governments, and businesses to become informed of high air pollution levels and take proactive steps to reduce those levels protecting the health of our citizens.

The *Plan* is based on DEQ's air quality forecast. During periods of degraded air quality the public will be notified of the air quality alert condition by the following symbols:



- ➔ An air quality alert condition of **GREEN** means that the air quality will be good for that day and there is no public action required.
- ➔ An air quality alert condition of **YELLOW** will be declared when the Air Quality Index (AQI) category of “moderate” has been forecasted for the following day. This means that the air quality is deteriorating and the increasing pollution levels may impact the health of sensitive populations, like children, the elderly, and people with breathing conditions.
- ➔ An air quality alert condition of **RED** will be declared when the AQI category of “moderate” or higher has been forecasted, **and** the weather conditions are expected to cause the pollution levels to go even higher.

The declaration of a **GREEN**, **YELLOW**, or **RED** air quality alert will be made by DEQ based on an analysis of pollutant indicators and meteorological conditions. When a **RED** alert has been declared and pollution levels are forecasted to continue to rise, DEQ will notify representatives from key agencies who will work together to disseminate information to the public and media. The goal of the group will be to implement specific actions in the community to relieve and reduce the pollution load on the airshed and to ensure that measures are taken to protect public health. Agencies that will participate include: DEQ, EPA-Boise Office, Central District Health Department, Southwest District Health Department, Community Planning Association, Ada County Highway District/Commuteride, Idaho Transportation Department-District 3, Oregon Department of Environmental Quality, and the National Weather Service.

During a **GREEN** air quality advisory Valley residents should still make commute and purchasing decisions with the quality of the air in mind. DEQ requests that even during a **GREEN** air quality alert residents take the following actions:

- ➔ **Limit Driving.** Consider carpooling or ridesharing options to reduce the driving associated with your daily commute. Anything that you can do to reduce vehicle emissions will help the quality of the air we breathe.

- ➔ **Combine Trips.** Consider combining all of your daily trips into one. Reducing the amount of times you have to make trips in a day will help limit air pollution, and will save money on fuel and vehicle maintenance.
- ➔ **Keep Vehicles Maintained.** A poorly maintained vehicle can pollute as much as 25 times more than a well-maintained one. Properly maintain your vehicle through regular oil changes, regular maintenance service, and proper tire inflation.

As the air quality in the Valley begins to deteriorate, DEQ will ask that the community take the actions requested in the **GREEN** air quality alert condition listed in the paragraph above **and** these further actions that correspond to a **YELLOW** air quality alert:

- ➔ **Comply with Open Burning Restrictions.** Many jurisdictions in the Valley have local ordinances that **prohibit open burning** when the air quality is poor. **Even if you live in an area where there is no local ordinance prohibiting burning, please consider not burning during an alert.** If you are not sure of the rules in your area, you can contact:

<i>Responsible Agency</i>	<i>Contact</i>
Ada County/Solid Waste Department	853-1297
Canyon County/ Local Fire Department	Local Phonebook
Boise/Boise Fire Department	384-3950
Caldwell/Caldwell Fire Department	455-3032
Garden City/Code Compliance	472-2900
Greenleaf/Greenleaf City Clerk	454-0552
Eagle/Eagle Fire Department	939-6463
Kuna/ Kuna City Clerk	922-5546
Meridian/Meridian Fire Department	888-1234
Middleton/Middleton Fire Department	585-6650
Nampa/Nampa Fire Department	465-2240
Notus/Notus City Clerk	459-6212
Parma/Parma Rural Fire	(208) 722-5716
Star/Star Fire Department	286-7772

With the quality of the air being poor and worsening, DEQ will asks that the community take the actions requested in both the **GREEN** and **YELLOW** air quality alert conditions listed above **and** these further actions, which correspond to a **RED** air quality alert:

- ➔ **Comply with Residential Woodburning Restrictions.** Canyon County, Ada County, and all of the cities in Ada County have local ordinances that **prohibit using your wood burning fireplace** when the air quality is poor. **Even if you live in an area where there is no local ordinance prohibiting fireplace use, please consider not burning during an alert.**
- ➔ **Use Video or Teleconferencing.** Consider using an alternative meeting forum if scheduled meetings require participants to drive to the meeting place. It is important to limit vehicle trips in the Valley as much as possible.
- ➔ **Allow Alternate Work Schedules.** Plan in advance for employees to stagger their work hours to decrease the air pollution from vehicles that builds up during the normal commute times.

- ➔ **Allow Telecommuting Options.** Reducing commute trips in the Valley during a **RED** air quality alert is critical to keeping pollution levels in check. Developing a policy ahead of time will allow a telecommuting program to be activated as soon as a **RED** air quality alert has been declared.
- ➔ **Minimize Industrial and Commercial Operations.** Minimizing pollution that comes from commercial and industrial activities can help lessen the severity of high pollution episodes, especially emissions of ammonia and sulfur dioxide. Develop a plan ahead of time that can be put into action as soon as a **RED** air quality alert has been declared.
- ➔ **Stop Diesel Engine Idling.** Diesel exhaust is a major contributor to PM_{2.5} formation and has been identified as a significant public health threat. Limiting engine idling can reduce exposure to exhaust from diesel engines and should be considered during a **RED** air quality alert.

DEQ is committed to working with the Treasure Valley community to develop plans for organizations to optimize their activities to reduce air pollution. If you would like assistance, or would like to be added to DEQ's *Wintertime Air Pollution Response Plan* email notification list please contact Leonard Herr at 373-0550, or via email at lherr@deq.state.id.us.